

**Notice of Allowability**

Application No.

10/078,447

Applicant(s)

ESHLEMAN ET AL.

Examiner

Art Unit

Kuen S. Lu

2167

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to August 4, 2006.
2. ☒ The allowed claim(s) is/are 1-15 and 17 (renumbered to 1-16).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application   |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>9/21/2006</u> . |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date <u>See Continuation Sheet</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                                 | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance                                     |
|  | 9. <input type="checkbox"/> Other _____.  |

Continuation of Attachment(s) 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date: 2/21/2002 and 7/25/2002.

### **DETAILED ACTION**

1. This communication is responsive to Applicant's Amendments filed August 4, 2006.

After a thorough search and examination of the present application, a telephone interview conducted on September 21, 2006, and in light of prior art made of record, Applicant's Remarks/Amendment of August 4, 2006 and Examiner's Amendments made on September 30, 2006, Claims 1-15 and 17 (renumbered to 1-16) are allowed.

#### ***Drawings***

2. The Drawings filed on February 21, 2002 are accepted.

#### ***Information Disclosure Statement***

3. The Information Disclosure Statements filed on February 21, 2002 and July 25, 2002 have been considered and electronically signed for formality as attached.

#### ***Priority***

4. Applicant's claim for the benefit of a prior-filed application, No. 60/270,126, filed February 21, 2002, under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged.

#### ***Examiner's Amendments***

5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this Examiner's amendment, listed below, was given in a telephone interview with Mr. Jeffrey Huter (Registration Number 41,086) on September 21, 2006. The update interview summary is attached.

5.1. The application has been amended as follows:

Please amend claim 16 as follow:

16 (Currently Canceled)

***Reasons for Allowance***

6. The following is an examiner's statement of reasons for allowance:

In the Examiner's Office Action for non-Final Rejection of March 7, 2006, 35 U.S.C. § 103, rejections was primarily based on Underwood: "SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR AN ACTIVITY FRAMEWORK DESIGN IN AN E-COMMERCE BASED ENVIRONMENT", U.S. Patent 6,718,535, filed JULY 30, 1999 and issued April 6, 2004; in view of Powell et al.: "INTERNET CONTENT DELIVERY ACCELERATION SYSTEM EMPLOYING A HYBRID CONTENT SELECTION SCHEME", U.S. Patent Application 2002/0073167, filed December 7, 2000 and published June 13, 2002, hereafter "Powell".

In the response filed on August 4, 2006 to Examiner's non-Final Rejection of March 7, 2006, concerning claim 1, Applicant argued that neither Powell nor Underwood are directed to systems which cache results from queries to a database, in particular, the references alone or in combination, does not disclose a remote server unit to process

queries through a cache DBMS server which checks a data structure consisting of query predicates. Applicant noted that query predicates are the components that make up or define a database query and argued that the proxy server of Powell may determine whether a digital object is cached based upon the URL of a received HTTP request, which would not equate the HTTP request with the query or equate the URL of the HTTP request with a query predicate. Further, Applicant argued neither reference discloses a database subscription manager that derives query results from a central DBMS server, sends the query results to a remote server unit, and creates a subscription to the query predicate, or adding the query predicate to the query predicate data structure.

Concerning claims 11 and 12, Applicant further argued the cited sections of the references as well as others teaching database client driver that includes a resource abstraction layer, and a plurality of predicates or equivalents be derived from the plurality of transactions, respectively.

Concerning claim 13, Applicant mainly argued the teaching of identifying predicates in a cache database and locking the predicates in the cache database and alleged the cited references fail to provide the teaching.

Concerning claim 14, Applicant argued that the cited references teaching on HTTP request is not a commit request, which is not equivalent to Applicant's receiving a commit request on the remote server unit from the application server.

Concerning claim 17, Applicant specifically pointed out that "opening a pool of serialized transactions on the central DBMS server" is not taught by either reference.

Regarding Applicant's lengthy argument concerning references' teaching, Applicant's claimed subject matter mainly falls in two categories:

**proxy server for users, drive local query result from a cache database and a central database, creating query predicate, adding query result to cache database and query predicate to a data structure; and implementing transaction isolation by opening a pool of serializable transaction, associating/opening the transaction, sending the transaction for processing and sending a rollback or commit message to remote server,** as described in detail in the independent claims 1, 11-14 and 17.

An updated search for the prior arts on EAST database and on domains (NPL-ACM, Google.com, NPL-IEEE) has been conducted. The prior arts searched and investigated in the database and domains does not fairly teach or suggest the teaching of the claimed subject matter as described above and reflected by the combined elements in each of the independent claims 1, 11-14 and 17.

The dependent claim(s) in the groups (2-10) and (15), depending claims 1 and 14, respectively, also distinct from the prior art for the same reason.


7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Contact Information**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S Lu whose telephone number is (571) 272-4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Page 13 published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

Kuen S. Lu   
Patent Examiner

September 30, 2006

  
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